FIG. 1

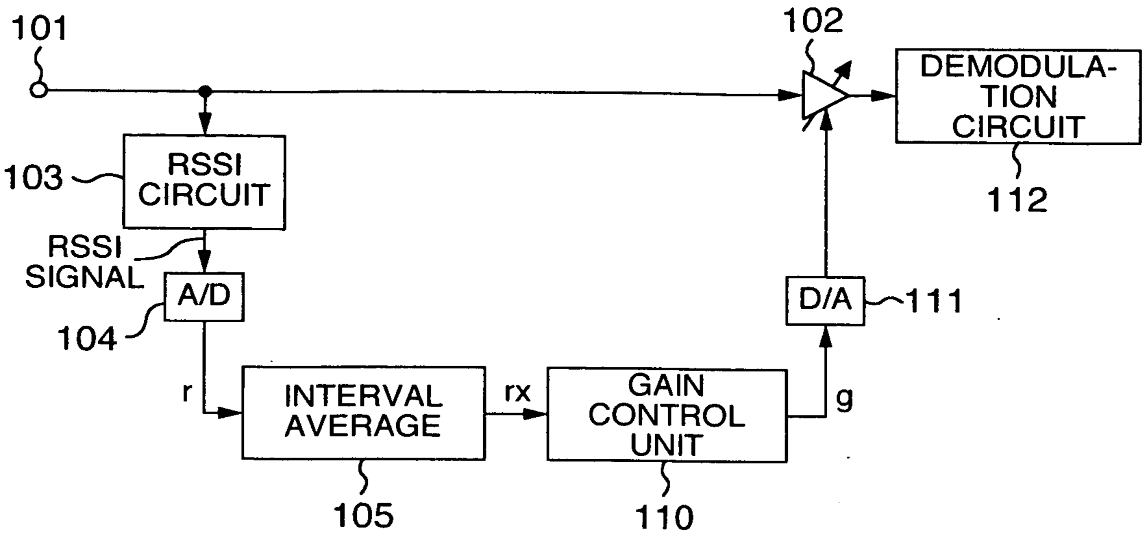


FIG. 2

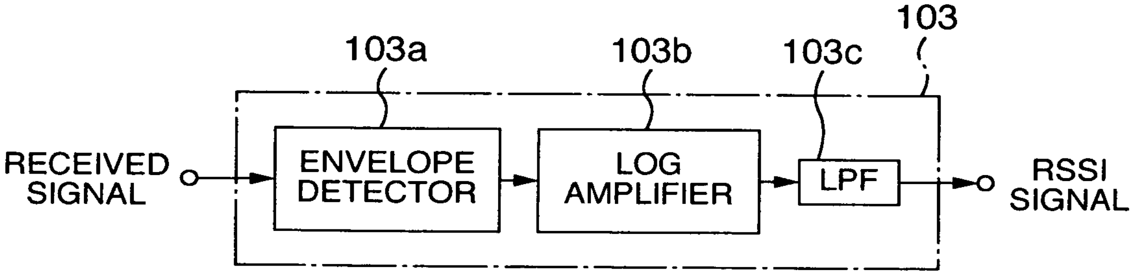


FIG. 3

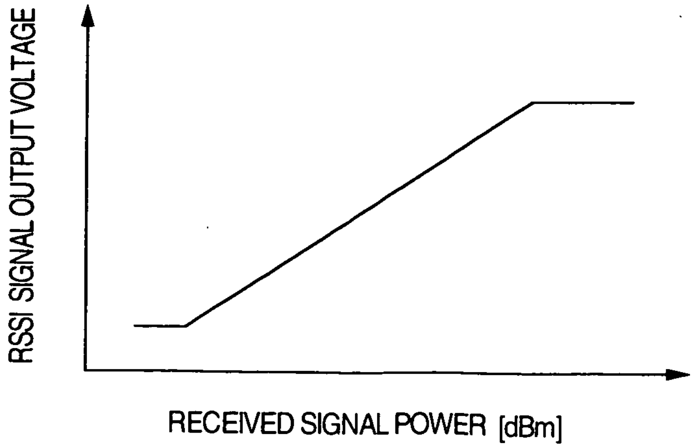


FIG. 4

LP+R	Pb	RI	SW	Pb	PI	G
40	88	56	32	56	104	8

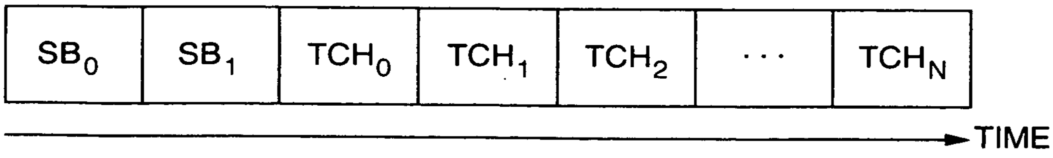
LP+R: LINEARIZER PREAMBLE LINE-UP
Pb: PREAMBLE
RI: COMMUNICATION INFORMATION CHANNEL
SW: SYNC WORD
PI: PARAMETER INFORMATION CHANNEL
G: GUARD TIME

FIG. 5

LP+R	Pb	Tch	RI	SW	UD	Tch
40	2	96	56	32	20	160

LP+R: LINEARIZER PREAMBLE LINE-UP
Pb: PREAMBLE
Tch: COMMUNICATION CHANNEL
RI COMMUNICATION INFORMATION CHANNEL
SW: SYNC WORD
UD: UNDEFINED PORTION

FIG. 6



SB_0, SB_1 : SYNC BURST
TCH_N : TRAFFIC CHANNEL FRAME

FIG. 7A
RECEIVED SIGNAL

FIG. 7B
RSSI SIGNAL r

FIG. 7C
INTERVAL AVERAGE rx OF r

FIG. 7D
CONTROL SIGNAL g

FIG. 7E
INPUT SIGNAL OF DEMODULATION CIRCUIT 112

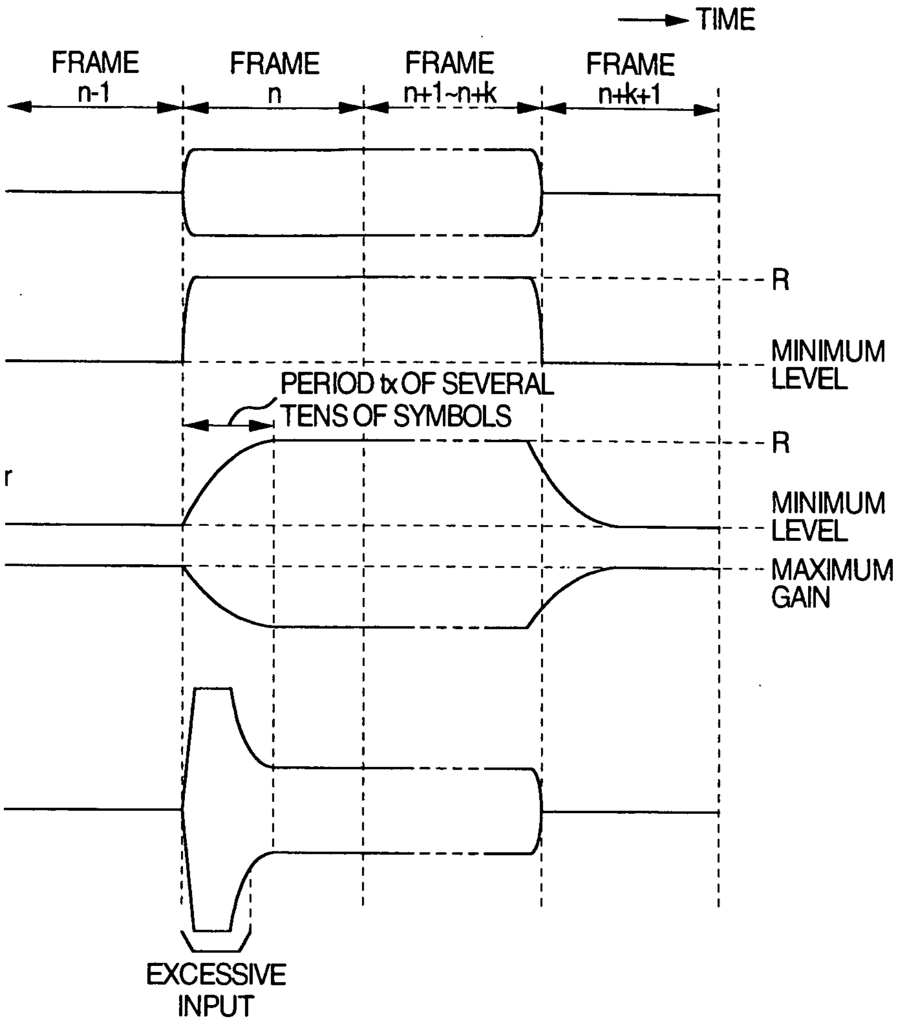


FIG. 8A
FRAME n

FIG. 8B
FRAMES n+1 TO n+k

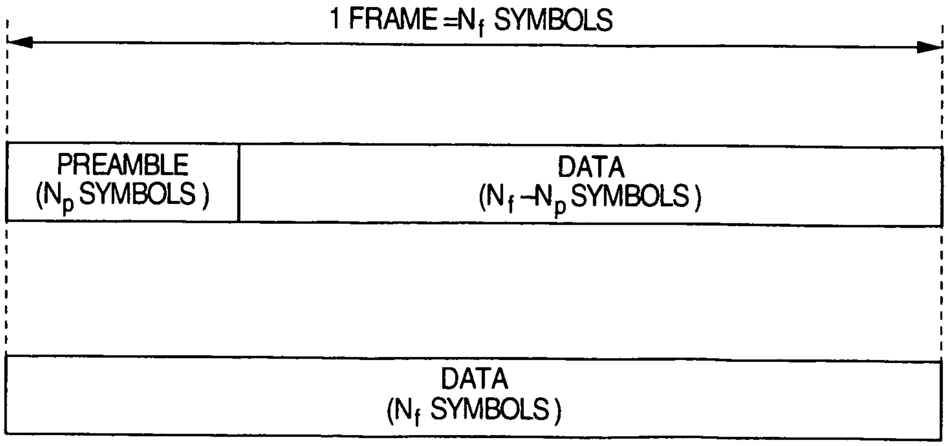
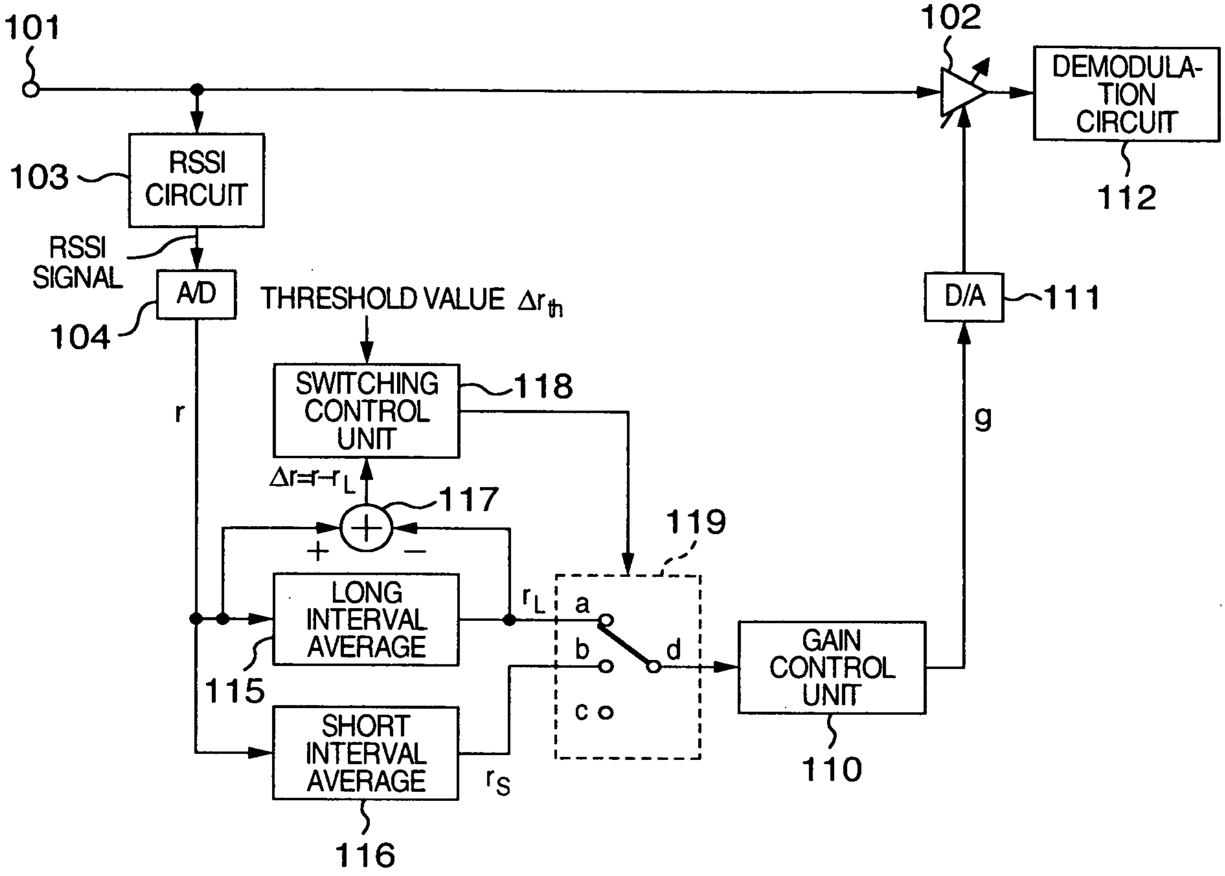
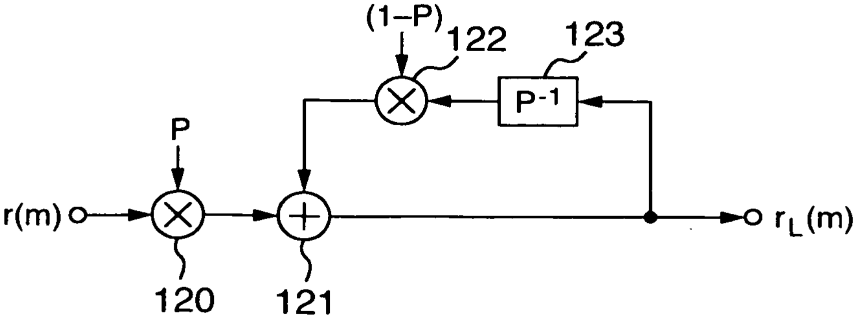


FIG. 9



101
102
DEMODULATION CIRCUIT
112
103
RSSI CIRCUIT
RSSI SIGNAL
A/D
104
THRESHOLD VALUE Δr_{th}
D/A
111
r
SWITCHING CONTROL UNIT
118
g
$\Delta r = r - r_L$
117
119
+
−
r_L
a
LONG INTERVAL AVERAGE
b
d
115
GAIN CONTROL UNIT
c
SHORT INTERVAL AVERAGE
r_S
110
116

FIG. 10



(1−P)
122
123
P^{-1}
P
r(m)
$r_L(m)$
120
121

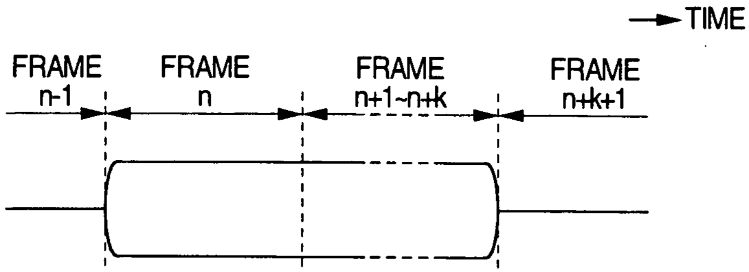


FIG. 11A

RECEIVED SIGNAL

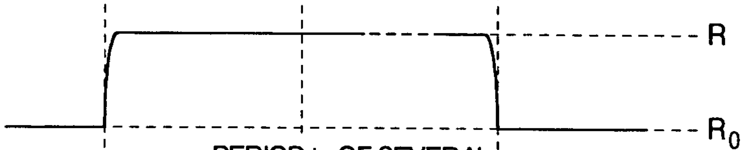


FIG. 11B

RSSI SIGNAL r

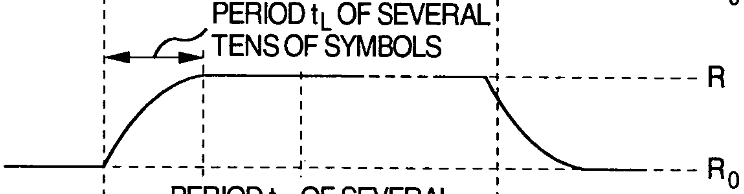


FIG. 11C

LONG INTERVAL AVERAGE r_L OF r

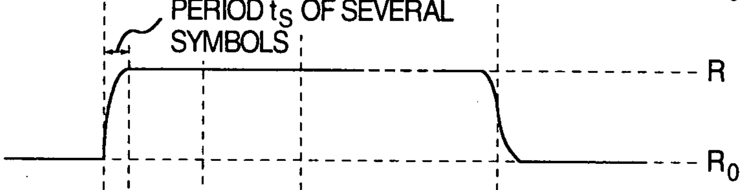


FIG. 11D

SHORT INTERVAL AVERAGE r_S OF r

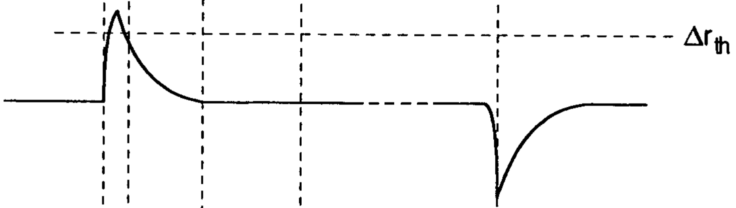


FIG. 11E

$\Delta r = r - r_L$

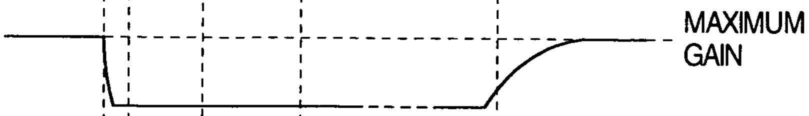


FIG. 11F

CONTROL SIGNAL g

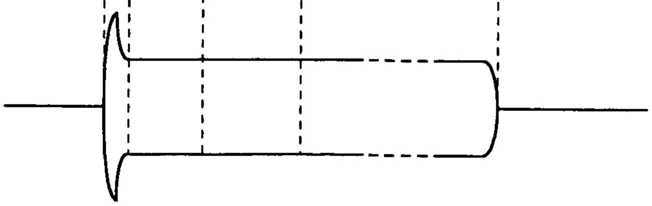


FIG. 11G

INPUT SIGNAL OF DEMODULATION CIRCUIT 112

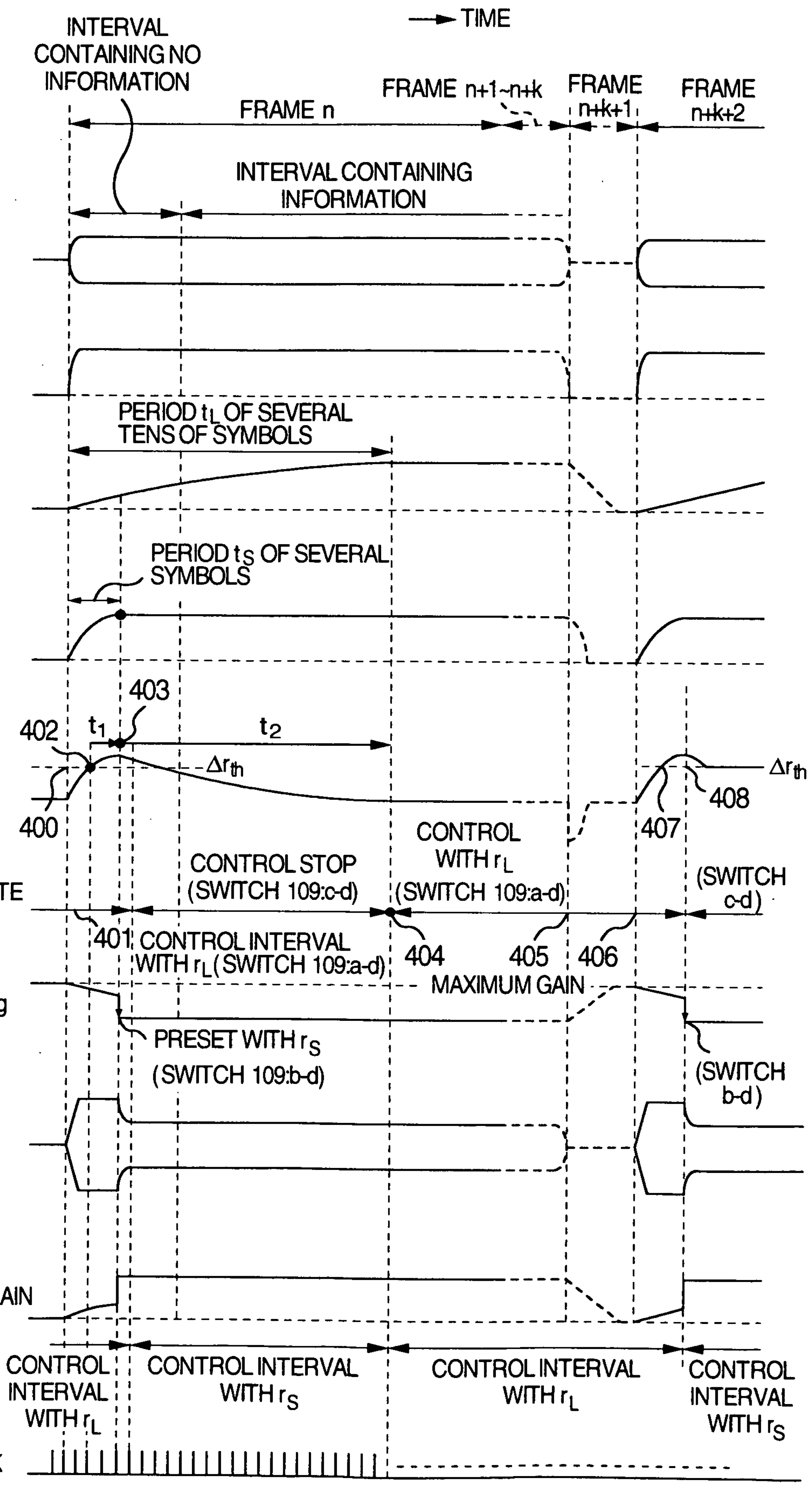


FIG. 12A
RECEIVED SIGNAL

FIG. 12B
RSSI SIGNAL r

FIG. 12C
LONG INTERVAL AVERAGE r_L OF r

FIG. 12D
SHORT INTERVAL AVERAGE r_S OF r

FIG. 12E
$\Delta r = r - r_L$

FIG. 12H
CONTROLLED STATE

FIG. 12F
CONTROL SIGNAL g

FIG. 12G
INPUT SIGNAL OF DEMODULATION CIRCUIT 112

FIG. 12I
INPUT SIGNAL TO GAIN CONTROL UNIT

FIG. 12J
OPERATION CLOCK

FIG. 13

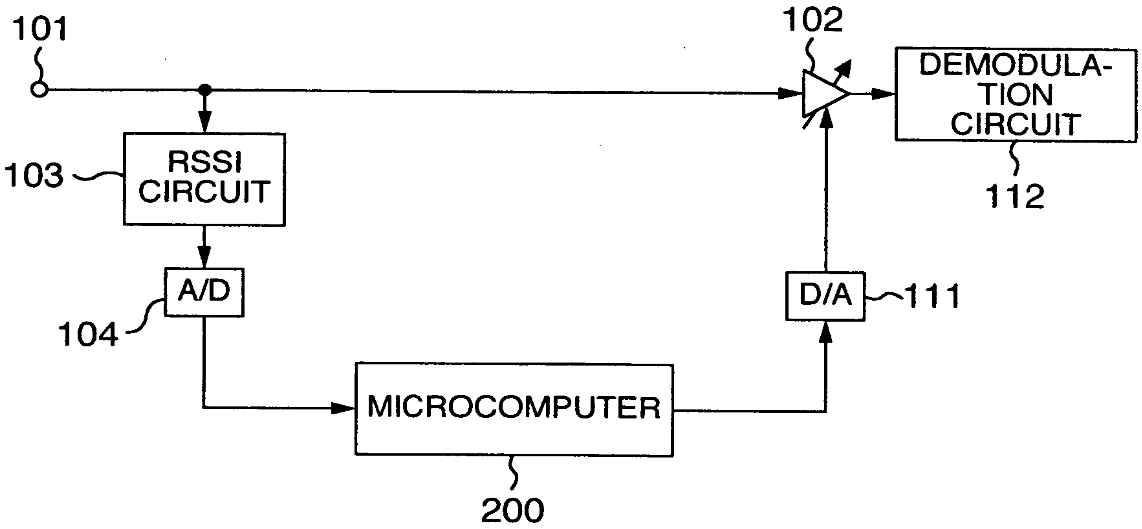
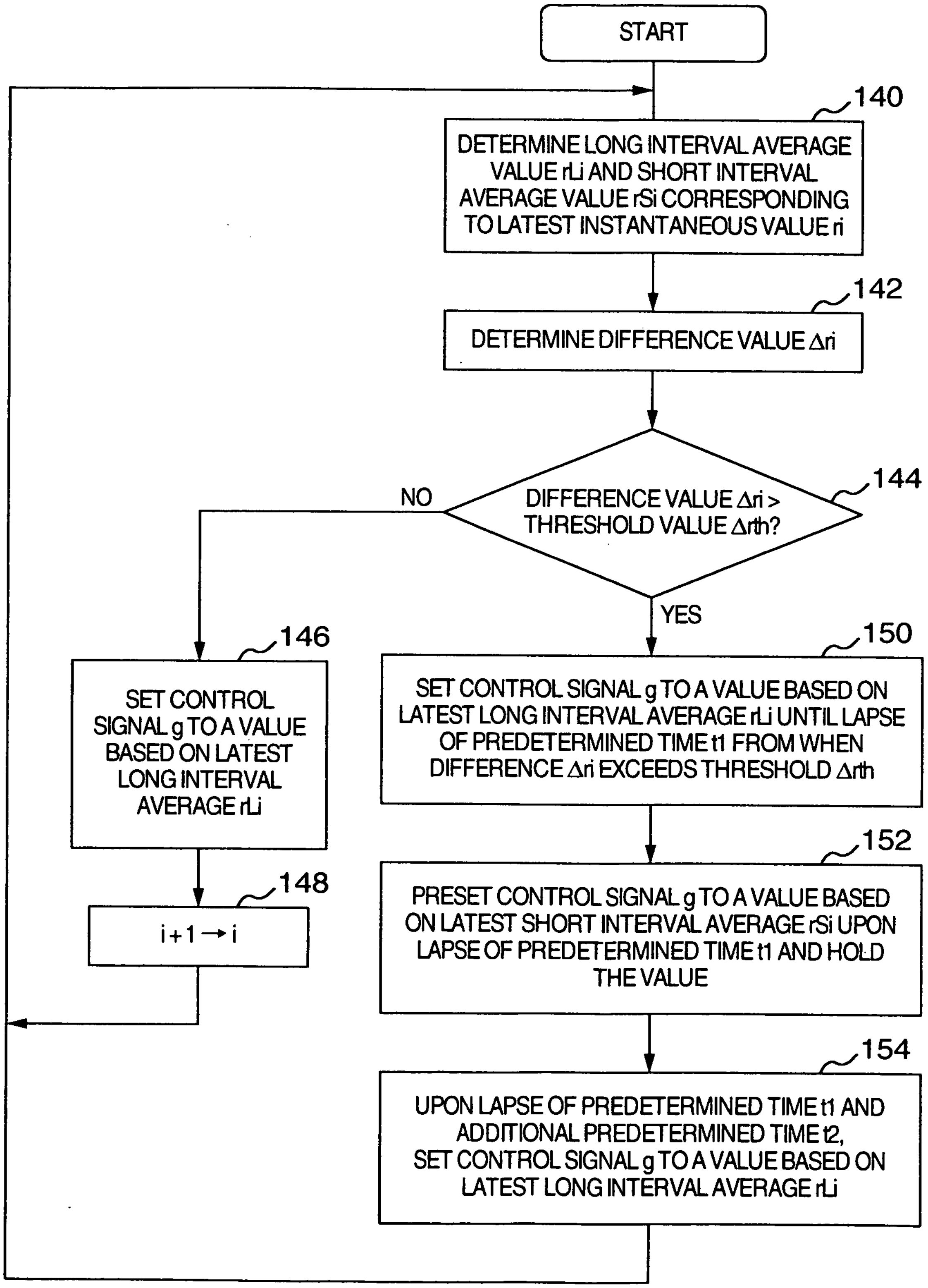

101
102
DEMODULA-TION CIRCUIT
103
RSSI CIRCUIT
112
A/D
D/A
111
104
MICROCOMPUTER
200

FIG. 14


START
140
DETERMINE LONG INTERVAL AVERAGE VALUE rLi AND SHORT INTERVAL AVERAGE VALUE rSi CORRESPONDING TO LATEST INSTANTANEOUS VALUE ri
142
DETERMINE DIFFERENCE VALUE Δri
144
DIFFERENCE VALUE Δri > THRESHOLD VALUE Δrth?
NO
YES
146
SET CONTROL SIGNAL g TO A VALUE BASED ON LATEST LONG INTERVAL AVERAGE rLi
148
i+1 → i
150
SET CONTROL SIGNAL g TO A VALUE BASED ON LATEST LONG INTERVAL AVERAGE rLi UNTIL LAPSE OF PREDETERMINED TIME t1 FROM WHEN DIFFERENCE Δri EXCEEDS THRESHOLD Δrth
152
PRESET CONTROL SIGNAL g TO A VALUE BASED ON LATEST SHORT INTERVAL AVERAGE rSi UPON LAPSE OF PREDETERMINED TIME t1 AND HOLD THE VALUE
154
UPON LAPSE OF PREDETERMINED TIME t1 AND ADDITIONAL PREDETERMINED TIME t2, SET CONTROL SIGNAL g TO A VALUE BASED ON LATEST LONG INTERVAL AVERAGE rLi